SONY

4-235-103-**13**(2)

Mini Hi-Fi Component System

Operating Instructions

Owner's Record

The model and serial numbers are located on the rear panel of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

COMPACT disc DIGITAL AUDIO

GameSync

MHC-RG4SR
MHC-RG30T
MHC-RG20/DX10
MHC-RG11

© 2001 Sony Corporation

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

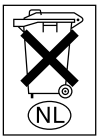
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

To prevent fire, do not Cover the ventilation of the apparatus with news papers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

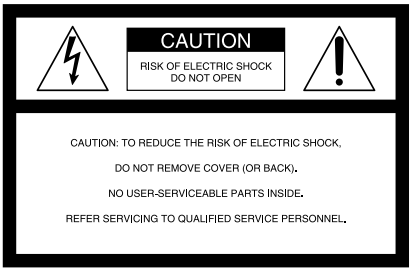
Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

This appliance is classified as a CLASS 1 LASER product. This label is located on the rear exterior.



Don't throw away the battery with general house waste, dispose of it correctly as chemical waste.

NOTICE FOR THE CUSTOMERS IN THE U.S.A.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

The use of optical instruments with this product will increase eye hazard.

INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

NOTICE FOR THE CUSTOMERS IN CANADA

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE

For the customers in North America

ENERGY STAR® is a U.S. registered mark.
As an ENERGY STAR® Partner, Sony Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

Table of Contents

Parts Identification

Main unit 4
Remote Control 5

Getting Started

Hooking up the system 6
Inserting two R6 (size AA) batteries into the remote 8
Setting the time 9
Saving the power in standby mode 9

CD

Loading a CD 10
Playing a CD — Normal Play/Shuffle Play/ Repeat Play 10
Programing CD tracks — Program Play 11
Using the CD display 12

Tuner

Presetting radio stations 12
Listening to the radio — Preset Tuning 13

Tape

Loading a tape 14
Playing a tape 14
Recording to a tape — CD Synchro Recording/ Recording Manually 15
Timer-recording radio programs 16

Sound Adjustment

Adjusting the sound 17
Selecting the sound effect 17
Selecting the surround effect 17

Other Features

Enhancing video game sound — Game Sync 18
Falling asleep to music — Sleep Timer 18
Waking up to music — Daily Timer 18

Optional Components

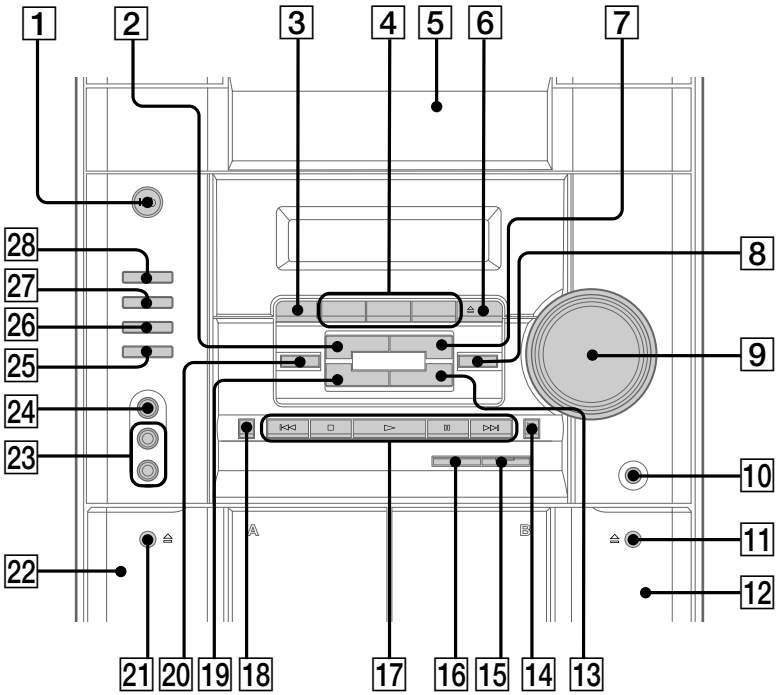
Connecting a video game machine 19

Additional Information

Precautions 20
Troubleshooting 22
Messages 24
Specifications 24

The items are arranged in alphabetical order. Refer to the pages indicated in parentheses for details.

Main unit

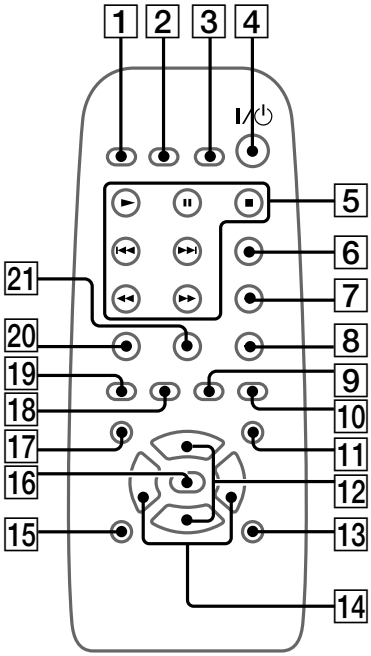


AUDIO jacks 23 (19)
CD 28 (10 – 12, 15)
CD SYNC 16 (15)
Deck A 22 (14)
Deck B 12 (14 – 16)
DISC 1 – 3 4 (10, 11)
DISC SKIP EX-CHANGE 3 (10, 11)
Disc tray 5 (10)
DISPLAY 20 (12)
EFFECT ON/OFF 13 (17)
GAME 25 (18 – 20)
GAME EQ 19 (17, 18, 20)
GROOVE 8 (17)
MOVIE EQ 7 (17)
MUSIC EQ 2 (17)
PHONES jack 10
REC PAUSE/START 15 (15)
TAPE A/B 26 (14, 15)
TUNER/BAND 27 (12, 13, 15)
VIDEO jack 24 (19, 20)
VOLUME control 9

BUTTON DESCRIPTIONS

I/⏻ (power) 1
⏏ OPEN/CLOSE 6
⏏ (deck B) 11
▶▶ (fast forward) 14
I◀◀ (go back) 17
▶▶I (go forward) 17
II (pause) 17
▷ (play) 17
■ (stop) 17
◀◀ (rewind) 18
⏏ (deck A) 21

Remote Control



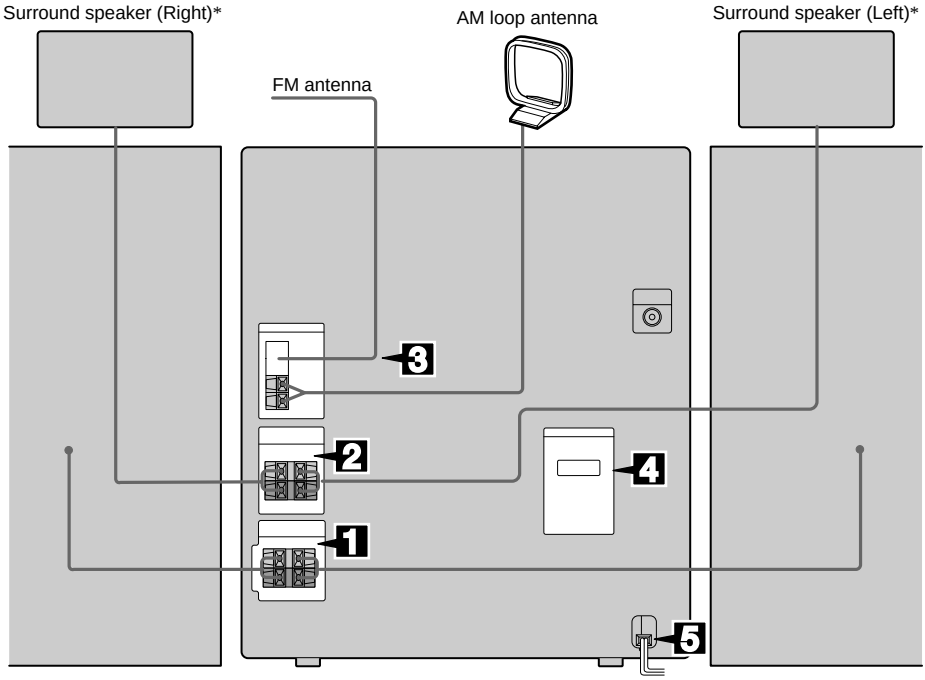
CD 19 (10 – 12, 15)
CLEAR 20 (11)
CLOCK/TIMER SELECT 2 (16, 19)
CLOCK/TIMER SET 3 (9, 16, 18)
DISPLAY 6 (12)
D.SKIP 7 (10)
ENTER 15 (9, 11 – 13, 16, 18, 19)
EQ +/– 14 (17)
GAME 10 (18 – 20)
GROOVE 13 (17)
ON/OFF 16 (17)
PLAY MODE 21 (10, 11)
PRESET +/– 5 (13)
REPEAT 8 (11)
SLEEP 1 (18)
STEREO/MONO 8 (13)
SURROUND 11 (17)
TAPE A/B 9 (14, 15)
TUNER MEMORY 17 (12, 13)
TUNER/BAND 18 (12, 13)
TUNING +/– 5 (12, 13)
VOL +/– 12

BUTTON DESCRIPTIONS

I/⏻ (power) 4
▶▶ (fast forward) 5
I◀◀ (go back) 5
▶▶I (go forward) 5
II (pause) 5
▶ (play) 5
◀◀ (rewind) 5
■ (stop) 5

Hooking up the system

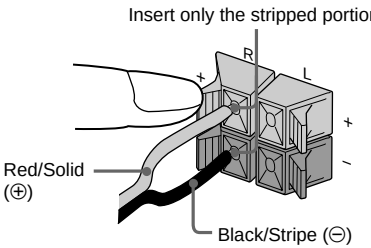
Perform the following procedure **1** to **5** to hook up your system using the supplied cords and accessories.



* MHC-RG4SR only

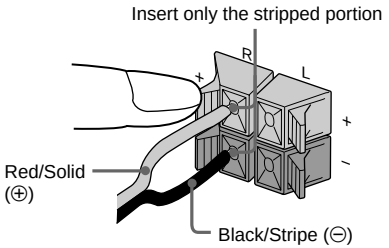
1 Connect the front speakers.

Connect the speaker cords to the SPEAKER jacks as shown below.



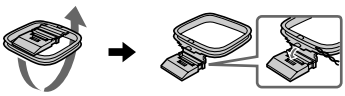
2 Connect the surround speakers. (MHC-RG4SR only)

Connect the speaker cords to the SURROUND SPK OUT PUT jacks as shown below.

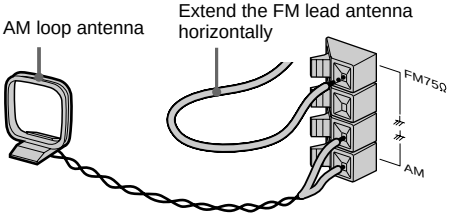


3 Connect the FM/AM antennas.

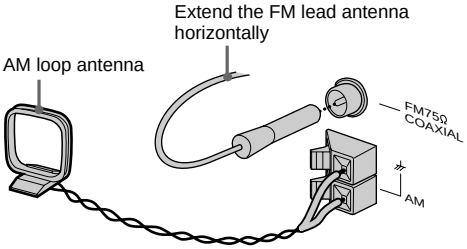
Set up the AM loop antenna, then connect it.



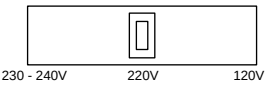
Jack type Ⓐ



Jack type Ⓑ



4 For models with a voltage selector, set VOLTAGE SELECTOR to the local power line voltage.



5 Connect the power cord to a wall outlet.

The demonstration appears in the display. When you press I/⏻, the system turns on and the demonstration automatically ends.

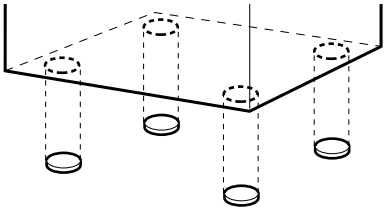
If the supplied adapter on the plug does not fit your wall outlet, detach it from the plug (only for models equipped with an adapter).

To connect optional components

See page 19.

To attach the front speaker pads

Attach the supplied front speaker pads to the bottom of the speakers to stabilize the speakers and prevent them from slipping.



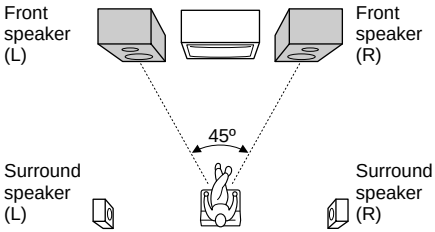
Notes

- Keep the speaker cords away from the antennas to prevent noise.
- Do not place the surround speakers on top of a TV. This may cause distortion of the colors in the TV screen.
- Be sure to connect both left and right surround speakers. Otherwise, the sound will not be heard.

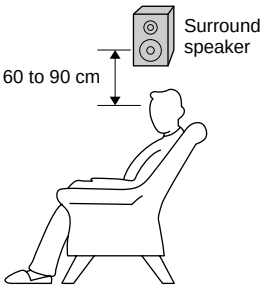
continued

Positioning the speakers (MHC-RG4SR only)

1 **Place the front speakers at an angle of 45 degrees from your listening position.**



2 **Place the surround speakers facing each other at about 60 to 90 cm above your listening position.**



When carrying this system

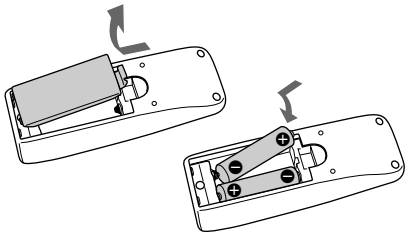
Perform the following procedure to protect the CD mechanism.

1 Make sure that all discs are removed from the system.

2 Press **I**/⏻ to turn off the system.

3 Unplug the power cord.

Inserting two R6 (size AA) batteries into the remote



Tip

With normal use, the batteries should last for about six months. When the remote no longer operates the system, replace both batteries with new ones.

Note

If you do not use the remote for a long period of time, remove the batteries to avoid possible damage from battery leakage.

Setting the time

1 **Press I/⏻ to turn on the system.**

2 **Press CLOCK/TIMER SET on the remote.**

Proceed to step 5 when “CLOCK” appears in the display.

3 **Press I◀◀ or ▶▶I repeatedly to select “SET CLOCK”.**

4 **Press ENTER on the remote.**

5 **Press I◀◀ or ▶▶I repeatedly to set the hour.**

6 **Press ENTER on the remote.**

The minute indication flashes.

7 **Press I◀◀ or ▶▶I repeatedly to set the minute.**

8 **Press ENTER on the remote.**

Tip

If you made a mistake or want to change the time, start over from step 2.

Note

The clock settings are canceled when you disconnect the power cord or if a power failure occurs.

Saving the power in standby mode

Press DISPLAY repeatedly when the system is off. Each time you press the button, the system switches cyclically as follows:

Demonstration → Clock display → Power Saving Mode

Tips

- I/⏻ indicator lights up even in the Power Saving Mode.
- The timer works even in the Power Saving Mode.

Note

You cannot set the time in the Power Saving Mode.

To cancel the Power Saving Mode

Press DISPLAY once to show the demonstration or twice to show the clock display.

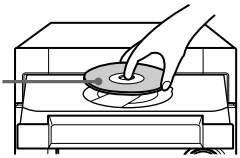
Loading a CD

1 **Press ⏏ OPEN/CLOSE.**

The disc tray opens.

2 **Place a CD with the label side up on the disc tray.**

When you play a CD single (8 cm CD), place it on the inner circle of the tray.



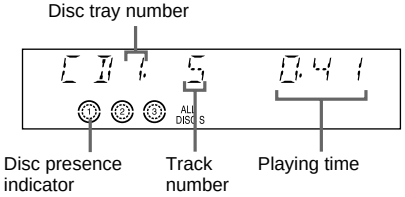
To insert additional discs, press DISC SKIP EX-CHANGE to rotate the disc tray.

3 **Press ⏏ OPEN/CLOSE to close the disc tray.**

Playing a CD

— Normal Play/Shuffle Play/Repeat Play

This system lets you play the CD in different play modes.



1 **Press CD.**

2 **Press PLAY MODE on the remote repeatedly until the mode you want appears in the display.**

Select	To play
ALL DISCS (Normal Play)	All CDs in the disc tray continuously.
1DISC (Normal Play)	The CD you have selected in original order.
ALL DISCS SHUF (Shuffle Play)	The tracks on all CDs in random order.
1DISC SHUF (Shuffle Play)	The tracks on the CD you have selected in random order.
PGM (Program Play)	The tracks on all CDs in the order you want them to be played (see “Programing CD tracks” on page 11).

3 **Press ▷ (or ► on the remote).**

Other Operations

To	Do this
Stop play	Press ■.
Pause	Press ❚❚. Press again to resume play.
Select a track	During play or pause, press ▶▶I (to go forward) or I◀◀ (to go back).
Find a point in a track	During play, press and hold ▶▶ (to go forward) or ◀◀ (to go back). Release it when you find the desired point.
Select a CD in stop mode	Press DISC 1 – 3 or DISC SKIP EX-CHANGE (or D.SKIP on the remote).

To	Do this
Switch to CD function from another source	Press DISC 1 – 3 (Automatic Source Selection). However, if a CD is used in a program, play does not start even if you press CD 1 – 3.
Remove a CD	Press ⏏ OPEN/CLOSE.
Exchange other CDs while playing	Press DISC SKIP EX-CHANGE.
Play repeatedly (Repeat Play)	Press REPEAT on the remote during play until “REP” or “REP 1” appears. REP*: For all the tracks on the CD up to five times. REP 1**: For a single track only. To cancel playing repeatedly, press REPEAT until “REP” or “REP 1” disappears.

* You cannot select “REP” and “ALL DISCS SHUF” at the same time.

** When you select “REP 1”, that track is repeated endlessly until “REP 1” is canceled.

Note

The play mode cannot be changed while playing a disc. To change the play mode, press ■ first to stop play.

Programing CD tracks

— Program Play

You can make a program of up to 32 tracks from all the CDs in the order you want to play them.

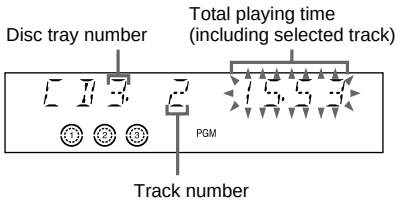
1 **Press CD, then place a CD.**

2 **Press PLAY MODE on the remote repeatedly until “PGM” appears in the display.**

3 **Press one of DISC 1 – 3 to select a CD.**

To program all the tracks on a CD at once, proceed to step 5 with “AL” displayed.

4 **Press I◄◄ or ►►I until the desired track appears in the display.**



5 **Press ENTER on the remote.**

The track is programed. The program step number appears, followed by the total playing time.

6 **Program additional discs or tracks.**

To program	Repeat steps
Other discs	3 and 5
Other tracks on the same disc	4 and 5
Other tracks on other discs	3 to 5

7 **Press ▻ (or ► on the remote).**

Other Operations

To	Do this
Cancel Program Play	Press PLAY MODE on the remote repeatedly until “PGM” and “SHUF” disappear.
Clear a track from the end	Press CLEAR on the remote in stop mode.
Clear the entire program	Press ■ once in stop mode or twice during play.

continued

Tips

- The program you made remains after Program Play finishes. To play the same program again, press CD, then press ▷ (or ► on the remote).
- "--.--" appears when the total CD program time exceeds 100 minutes, or when you select a CD track whose number is 21 or over.

Using the CD display

You can check the remaining time of the current track or the entire CD.

Press DISPLAY repeatedly.

During normal play

Playing time of the current track → Remaining time of the current track → Remaining time of current CD → Clock display (for eight seconds) → Effect status

In stop mode

During Program Play mode when there is a program:

The last track number of the program and the total playing time → Total number of programed tracks (for eight seconds) → Clock display (for eight seconds) → Effect status

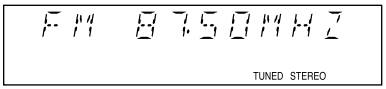
Presetting radio stations

You can preset up to 20 stations for FM and 10 stations for AM.

1 **Press TUNER/BAND repeatedly to select "FM" or "AM".**

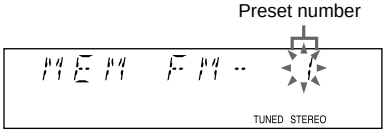
2 **Press and hold ◀◀ or ▶▶ (or TUNING – or + on the remote) until the frequency indication starts to change, then release it.**

Scanning stops automatically when the system tunes in a station.



3 **Press TUNER MEMORY on the remote.**

A preset number appears in the display. The stations are stored from preset number 1.



4 **Press ENTER on the remote.**

"COMPLETE" appears.
The station is stored.

5 **Repeat steps 1 to 4 to store other stations.**

To tune in a station with a weak signal

Press ◀◀ or ▶▶ (or TUNING – or + on the remote) repeatedly in step 2 to tune in the station manually.

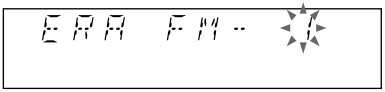
To set another station to an existing preset number

Start over from step 1. After step 3, press ⏮ or ⏭ (or PRESET – or + on the remote) repeatedly to select the preset number you want to store the other station.

You can preset a new station in the selected preset number.

To erase a preset station

1 Press and hold TUNER MEMORY on the remote until a preset number appears in the display.



2 Press ⏮ or ⏭ (or PRESET – or + on the remote) repeatedly to select the preset number you want to erase.

Select “ALL ERASE” when you want to erase all the preset stations.

3 Press ENTER on the remote.

“COMPLETE” appears.

When you erase a preset number, the preset number decreases by one and all preset numbers following the erased one are renumbered.

To change the AM tuning interval (except for the European and Middle Eastern models)

The AM tuning interval is factory-set to 9 kHz (10 kHz in some areas). To change the AM tuning interval, tune in any AM station first, then turn off the system. While holding down TUNER/BAND, turn the system back on. When you change the interval, all the AM preset stations are erased. To reset the interval, repeat the same procedure.

Tip

The preset stations are retained for half a day even if you unplug the power cord or if a power failure occurs.

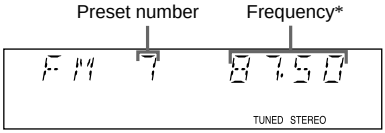
Listening to the radio

— Preset Tuning

Preset radio stations in the tuner’s memory first (see “Presetting radio stations” on page 12).

1 Press TUNER/BAND repeatedly to select “FM” or “AM”.

2 Press ⏮ or ⏭ (or PRESET – or + on the remote) repeatedly to tune in the desired preset station.



* When only one station is preset, “ONE PRESET” appears in the display.

To listen to non-preset radio stations

Use manual or automatic tuning in step 2.
For manual tuning, press ◀◀ or ▶▶ (or TUNING – or + on the remote) repeatedly. For automatic tuning, press and hold ◀◀ or ▶▶ (or TUNING – or + on the remote).

Tips

- When an FM stereo program has static noise, press STEREO/MONO repeatedly until “MONO” appears. There will be no stereo effect, but the reception will improve.
- To improve broadcast reception, adjust the supplied antennas.

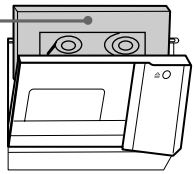
Loading a tape

1 **Press TAPE A/B repeatedly to select deck A or B.**

2 **Press ⏏.**

3 **Insert a tape in deck A or B with the side you want to play/record facing forward.**

With the side you want to play/record facing forward.



Playing a tape

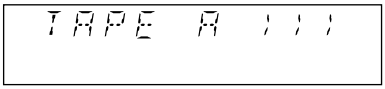
You can use TYPE I (normal) tape.

1 **Load a tape.**

To play both decks in succession, press PLAY MODE on the remote repeatedly until “RELAY” (Relay Play)* appears in the display.

2 **Press ▷ (or ► on the remote).**

The tape starts playing.



* After the playback of the front side of deck A, deck B plays the front side, then stops.

To	Do this
Stop play	Press ■.
Pause	Press ❚❚. Press again to resume play.
Fast-forward or rewind	Press ◀◀ or ▶▶.
Remove the cassette	Press ⏏.

Searching for the beginning of the current or the next track (AMS)*

To go forward

Press ▶▶| during playback.
“TAPE A (or TAPE B) >> +1” appears.

To go back

Press |◀◀ during playback.
“TAPE A (or TAPE B) << –1” appears.

* AMS (Automatic Music Sensor)

Note

The AMS function may not operate correctly under the following circumstances:
– When the unrecorded space between songs is less than 4 seconds long.
– When the system is placed near a television.

Recording to a tape

— CD Synchro Recording/Recording Manually

You can record from a CD, tape or radio. You can use TYPE I (normal) tapes. The recording level is adjusted automatically.

Steps	Recording from a CD (CD Synchro Recording)	Recording from a CD/tape/radio manually
1	**Load a recordable tape into deck B.**	
2	**Press CD.**	**Press CD, TAPE A/B or TUNER/BAND.**
3	**Load the CD you want to record.**	**Load the CD or tape, or tune in the station you want to record.**
4	**Press CD SYNC.**	**Press REC PAUSE/START.**
	Deck B stands by for recording. “REC” flashes.	
5	**Press REC PAUSE/START.** Recording starts.	**Press REC PAUSE/START, and then start playing the desired source.**

To stop recording

Press ■.

Tip

For recording from the radio:
If noise is heard while recording from the radio, move the respective antenna to reduce the noise.

Note

You cannot listen to other sources while recording.

Timer-recording radio programs

You can record a preset radio station from a specified time.

To timer-record, you must first preset the radio station (see “Presetting radio stations” on page 12) and set the clock (see “Setting the time” on page 9).

1 **Tune in the preset radio station (see “Listening to the radio” on page 13).**

2 **Press CLOCK/TIMER SET on the remote.**

“SET DAILY” appears.

3 **Press I◄◄ or ►►I repeatedly to select “SET REC”, then press ENTER on the remote.**

“ON” appears and the hour indication flashes in the display.

4 **Set the time to start recording.**

Press I◄◄ or ►►I repeatedly to set the hour, then press ENTER on the remote.

The minute indication starts flashing.

Press I◄◄ or ►►I repeatedly to set the minute, then press ENTER on the remote.

5 **Repeat step 4 to set the time to stop recording.**

The start time appears, followed by the stop time, the preset radio station to be recorded (e.g., “TUNER FM 5”), then the original display appears.

6 **Load a recordable tape into deck B.**

7 **Press I/⏻ to turn off the system.**

When the recording starts, the volume level is set to minimum.

To	Do this
Check the setting	Press CLOCK/TIMER SELECT on the remote and press I◄◄ or ►►I repeatedly to select “SEL REC”. Then, press ENTER on the remote. To change the setting, start over from step 1.
Cancel the timer	Press CLOCK/TIMER SELECT on the remote and press I◄◄ or ►►I repeatedly to select “TIMER OFF”, then press ENTER on the remote.

Notes

- If the system is on at the preset time, the recording will not be made.
- When you use the Sleep Timer, Daily Timer and Timer-recording will not turn on the system until the Sleep Timer turns it off.

Adjusting the sound

You can reinforce the bass and create a more powerful sound.

Press GROOVE.

"GROOVE" appears in the display and the volume switches to power mode.

Press again to cancel GROOVE.

Selecting the sound effect

Selecting the effect from the music menu

Press MUSIC EQ, MOVIE EQ or GAME EQ (or EQ +/–* on the remote) repeatedly to select the preset you desire.

The preset name appears in the display.
See the chart "Sound effect options".

* You can select all of the effects in order.

To cancel the effect

Press EFFECT ON/OFF (or ON/OFF on the remote).

Sound effect options

"SURR" appears if you select an effect with surround effects.

MUSIC EQ

Effect	
ROCK POP	Standard music sources

MOVIE EQ

Effect	
MOVIE	Soundtracks and special listening situations

GAME EQ

Effect	
GAME	PlayStation 1, 2 and other video game music sources

Selecting the surround effect

Press SURROUND on the remote.

"SURR" appears in the display.

Press again to cancel SURROUND.

Enhancing video game sound

— Game Sync

You need to connect a video game machine (see “Connecting a video game machine” on page 19).

Press GAME.

Tips

- In the standby mode, the system automatically turns on.
- The GAME EQ is automatically selected.
- These operations cannot be performed in the Power Saving Mode.

Falling asleep to music

— Sleep Timer

You can set the system to turn off after a certain time, so that you can fall asleep to music.

Press SLEEP on the remote.

Each time you press the button, the minute display (the turn-off time) changes cyclically as follows:

AUTO* → 90 MIN → 80 MIN → 70 MIN → ··· → 10 MIN → OFF

* The system turns off when the current CD or tape finishes playback (for up to 100 minutes).

Other Operations

To	Press
Check the remaining time	SLEEP on the remote once.
Change the time to turn off	SLEEP on the remote repeatedly to select the time you want.
Cancel the Sleep Timer function	SLEEP on the remote repeatedly until “SLEEP OFF” appears.

Waking up to music

— Daily Timer

You can wake up to music at a preset time. Make sure you have set the clock (see “Setting the time” on page 9).

1 **Prepare the music source you want to play.**
- CD: Load a CD. To start from a specific track, make a program (see “Programing CD tracks” on page 11).
- Tape: Load a tape with the side you want to play facing forward.
- Radio: Tune in the preset station you want (see “Listening to the radio” on page 13).

2 **Adjust the volume.**

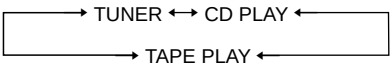
3 **Press CLOCK/TIMER SET on the remote.**
“SET DAILY” appears.

4 **Press ENTER on the remote.**
“ON” appears and the hour indication flashes.

5 **Set the time to start playing.**
Press I◄◄ or ►►I repeatedly to set the hour, then press ENTER on the remote.
The minute indication flashes.
Press I◄◄ or ►►I repeatedly to set the minute, then press ENTER on the remote.

6 **Repeat step 5 to set the time to stop playing.**

7 **Press I◄◄ or ►►I repeatedly until the music source you want appears.**
The indication changes as follows:



8 Press ENTER on the remote.

The type of timer (“DAILY”), followed by the start time, stop time, and the music source, appear, then the original display appears.

9 Press I/⏻ to turn off the system.

Other Operations

To	Do this
Check the setting	Press CLOCK/TIMER SELECT on the remote and press ⏮ or ⏭ repeatedly to select “SEL DAILY”, then press ENTER on the remote.
Change the setting	Start over from step 1.
Cancel the timer	Press CLOCK/TIMER SELECT on the remote and press ⏮ or ⏭ repeatedly to select “TIMER OFF”, then press ENTER on the remote.

Tip

The system turns on 15 seconds before the preset time.

Notes

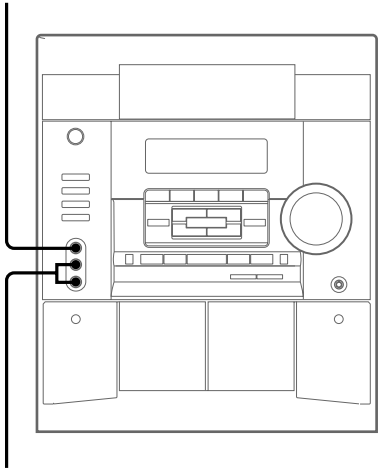
- When you use the Sleep Timer, the Daily Timer will not turn on the system until the Sleep Timer turns it off.
- You cannot activate the Daily Timer and Timer-recording at the same time.

Connecting a video game machine

Connect the video output of the video game machine to the VIDEO jack, and the audio output to the AUDIO jacks on the front panel of the system. Connect the VIDEO OUT jack on the rear panel of the system to the video input of a TV using the optional video cable.

To listen to the sound of the connected video game machine, press GAME.

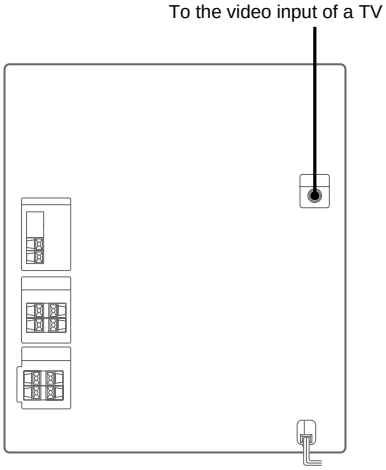
To the video output of the video game machine



To the audio output of the video game machine

continued

Connecting a video game machine (continued)



Notes

- The video game machine image may appear on the TV screen even if the system is turned off.
- See “Selecting the sound effect” on page 17 for video game sound effects.
- If you press GAME while the system is off, the system turns on, the function switches to GAME, and the equalizer also switches to the GAME EQ.
- If you press GAME while the system is on, the function switches to GAME and the equalizer automatically switches to the GAME EQ in the same manner.

Precautions

On operating voltage

Before operating the system, check that the operating voltage of your system is identical with the voltage of your local power supply.

On safety

- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Unplug the system from the wall outlet (mains) if it is not to be used for an extended period of time. To disconnect the cord (mains lead), pull it out by the plug. Never pull the cord itself.
- Should any solid object or liquid fall into the component, unplug the system and have it checked by qualified personnel before operating it any further.
- The AC power cord must be changed only at a qualified service shop.

On placement

- Place the system in a location with adequate ventilation to prevent heat build up.
- Do not place the system in an inclined position.
- Do not place the system in locations where it is:
  - — Extremely hot or cold
  - — Dusty or dirty
  - — Very humid
  - — Subject to vibrations
  - — Subject to direct sunlight.
- Use caution when placing the unit or speakers on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

On heat build up

- Although the system heats up during operation, this is not a malfunction.
- Place the system in a location with adequate ventilation to prevent heat build-up in the system.
- If you continuously use this system at a large volume, the cabinet temperature of the top, side and bottom rises considerably. To avoid burning yourself, do not touch the cabinet.
- To prevent a malfunction, do not cover the ventilation hole for the cooling fan.

On operation

- If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD player. Should this occur, the system will not operate properly. Remove the CD and leave the system turned on for about an hour until the moisture evaporates.
- When you move the system, take out any discs.

If you have any questions or problems concerning your stereo system, please consult your nearest Sony dealer.

Notes on CDs

- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.
- Do not use solvents.
- Do not expose the CD to direct sunlight or heat sources.

Note on CD-R playback

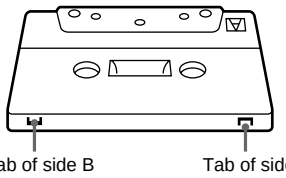
Discs recorded on CD-R drives may not be played back because of scratches, dirt, recording condition or the drive's characteristics. Besides, the discs, which are not yet finalized at the end of recording, cannot be played back.

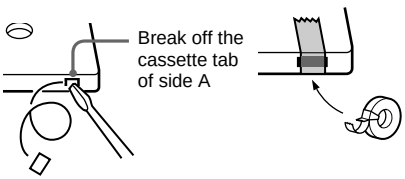
Cleaning the cabinet

Use a soft cloth slightly moistened with mild detergent solution.

To save a tape permanently

To prevent a tape from being accidentally recorded over, break off the cassette tab from side A or B as illustrated. If you later want to reuse the tape for recording, cover the broken tab with adhesive tape.





Before placing a cassette in the tape deck

Take up any slack in the tape. Otherwise the tape may get entangled in the parts of the tape deck and become damaged.

When using a tape longer than 90 minutes

The tape is very elastic. Do not change the tape operations such as play, stop, and fast-winding frequently. The tape may get entangled in the tape deck.

Cleaning the tape heads

Clean the tape heads after every 10 hours of use.

Be sure to clean the tape heads before you start an important recording or after playing an old tape. Use a separately sold dry-type or wet-type cleaning cassette. For details, refer to the instructions of the cleaning cassette.

Demagnetizing the tape heads

Demagnetize the tape heads and the metal parts that have contact with the tape every 20 to 30 hours of use with a separately sold demagnetizing cassette. For details, refer to the instructions of the demagnetizing cassette.

Troubleshooting

If you have any problem using this system, use the following check list.

First, check that the power cord is connected firmly and the speakers are connected correctly and firmly.

Should any problem persist, consult your nearest Sony dealer.

General

The display starts flashing as soon as you plug in the power cord even though you haven't turned on the system (see step 5 of "Hooking up the system" on page 7).

- Press DISPLAY twice when the system is turned off. The demonstration disappears.

The clock setting/radio presetting/timer is canceled.

- The power cord is disconnected or a power failure occurs longer than half a day.
  Redo the following:
  — "Setting the time" on page 9
  — "Presetting radio stations" on page 12
  If you have set the timer, also redo "Waking up to music" on page 18 and "Timer-recording radio programs" on page 16.

There is no sound.

- Turn VOLUME clockwise.
- The headphones are connected.
- Insert only the stripped portion of the speaker cord into the SPEAKER jack. Inserting the vinyl portion of the speaker cord will obstruct the speaker connections.
- There is no audio output during timer recording.

There is severe hum or noise.

- A TV or VCR is placed too close to the stereo system. Move the stereo system away from the TV or VCR.

"0:00" (or "12:00 AM") flashes in the display.

- A power interruption occurred. Set the clock and timer settings again.

The timer does not function.

- Set the clock correctly.

"DAILY" and "REC" do not appear when you press CLOCK/TIMER SET.

- Set the timer correctly.
- Set the clock.

The remote does not function.

- There is an obstacle between the remote and the system.
- The remote is not pointing in the direction of the system's sensor.
- The batteries have run down. Replace the batteries.

There is acoustic feedback.

- Reduce the volume.

The color irregularity on a TV screen persists.

- Turn off the TV set once, then turn it on after 15 to 30 minutes. If the color irregularity still persists, place the speakers farther away from the TV set.

"PROTECT" and "PUSH POWER" appear alternately.

- A strong signal was input. Press I/⏻ to turn off the system, leave the system turned off for a while, then press I/⏻ again to turn on the system. If "PROTECT" and "PUSH POWER" appear alternately even after the system is turned on again, press I/⏻ to turn off the system and check the speaker cord.

Speakers

Sound comes from one channel or unbalanced left and right volume.

- Check the speaker connection and speaker placement.

Sound lacks bass.

- Check that the speaker's + and – jacks are connected correctly.

CD Player

The CD tray does not close.

- The CD is not placed properly.

The CD will not play.

- The CD is not lying flat in the disc tray.
- The CD is dirty.
- The CD is loaded label side down.
- There is moisture on the CD.

Play does not start from the first track.

- The player is in program or shuffle mode. Press PLAY MODE repeatedly until "PGM" or "SHUF" disappears.

Tape Deck

The tape does not record.

- No tape in the cassette holder.
- The tab has been removed from the cassette (see "To save a tape permanently" on page 21).
- The tape has reeled to the end.

The tape does not record nor play or there is a decrease in sound level.

- The heads are dirty (see "Cleaning the tape heads" on page 21).
- The record/playback heads are magnetized (see "Demagnetizing the tape heads" on page 21).

The tape does not erase completely.

- The record/playback heads are magnetized (see "Demagnetizing the tape heads" on page 21).

There is excessive wow or flutter, or the sound drops out.

- The capstans or pinch rollers are dirty (see "Cleaning the tape heads" on page 21).

Noise increases or the high frequencies are erased.

- The record/playback heads are magnetized (see "Demagnetizing the tape heads" on page 21).

Tuner

There is severe hum or noise ("TUNED" or "STEREO" flashes in the display).

- Adjust the antenna.
- The signal strength is too weak. Connect the external antenna.

A stereo FM program cannot be received in stereo.

- Press STEREO/MONO repeatedly until "MONO" disappears.

If other troubles not described above occur, reset the system as follows:

1 Unplug the power cord.

2 Plug the power cord back in.

3 Press ■, DISPLAY, and **I**/⏻ at the same time.

4 Press **I**/⏻ to turn on the system.

The system is reset to the factory settings. All the settings you made are cleared.

Messages

One of the following messages may appear or flash in the display during operation.

NO DISC

- There is no CD on the disc tray.

OVER

- You have reached the end of the CD.

Specifications

AUDIO POWER SPECIFICATIONS:
(MHC-RG4SR USA model only)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

with 6 ohm loads both channels driven, from 120 – 10,000 Hz; rates 100 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

Total harmonic distortion less than 0.07% (6 ohms at 1 kHz, 50 W)

(MHC-RG30T USA model only)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

with 6 ohm loads both channels driven, from 120 – 10,000 Hz; rates 75 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

Total harmonic distortion less than 0.07% (6 ohms at 1 kHz, 30 W)

(MHC-RG20 USA model only)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

with 6 ohm loads both channels driven, from 120 – 10,000 Hz; rates 60 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

Total harmonic distortion less than 0.07% (6 ohms at 1 kHz, 30 W)

Amplifier section

Canadian models:
MHC-RG30T

Continuous RMS power output (reference)
75 + 75 watts (6 ohms at 1 kHz, 10% THD)
Total harmonic distortion less than 0.07% (6 ohms at 1 kHz, 50 W)

MHC-RG20

Continuous RMS power output (reference)
60 + 60 watts (6 ohms at 1 kHz, 10% THD)
Total harmonic distortion less than 0.07% (6 ohms at 1 kHz, 30 W)

European model:
MHC-RG20/RG11

DIN power output (rated) 40 + 40 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
50 + 50 watts (6 ohms at 1 kHz, 10% THD)
Music power output (reference)
95 + 95 watts (6 ohms at 1 kHz, 10% THD)

Other model:
MHC-DX10

The following measured at AC 120, 220, 240 V 50/60 Hz
DIN power output (rated) 40 + 40 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
50 + 50 watts (6 ohms at 1 kHz, 10% THD)

Inputs
GAME (AUDIO) IN (phono jack):
voltage 450 mV, impedance 47 kilohms

Outputs
PHONES (stereo mini jack):
accepts headphones of 8 ohms or more
Front speaker: accepts impedance of 6 to 16 ohms
Surround speaker (MHC-RG4SR only):
accepts impedance of 6 to 16 ohms

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (λ=780 nm) Emission duration: continuous
Frequency response	2 Hz – 20 kHz (±0.5 dB)
Wavelength	780 – 790 nm
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB

Tape deck section

Recording system	4-track 2-channel stereo
Frequency response	40 – 13,000 Hz (±3 dB), using Sony TYPE I cassette
Wow and flutter	±0.15% W.Peak (IEC) 0.1% W.RMS (NAB) ±0.2% W.Peak (DIN)

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 – 108.0 MHz
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range
Pan-American models: 530 – 1,710 kHz (with the interval set at 10 kHz)
531 – 1,710 kHz (with the interval set at 9 kHz)
European and Middle Eastern models:
531 – 1,602 kHz (with the interval set at 9 kHz)
Other models: 531 – 1,602 kHz (with the interval set at 9 kHz)
530 – 1,710 kHz (with the interval set at 10 kHz)

Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

continued

Specifications (continued)

Speaker

North American model:
Front speaker SS-RG4 for MHC-RG4SR

Speaker system	2-way, 2-unit, bass-reflex type
Speaker units	
Woofer:	13 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 200 × 325 × 223 mm
Mass	Approx. 3.1 kg net per speaker

North American and European models:
Front speaker SS-RG20 for MHC-RG20

Speaker system	2-way, 2-unit, bass-reflex type
Speaker units	
Woofer:	13 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 200 × 325 × 223 mm
Mass	Approx. 2.9 kg net per speaker

Front speaker SS-RG11 for MHC-RG11

Speaker system	2-way, 2-unit, bass-reflex type
Speaker units	
Woofer:	13 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 200 × 325 × 223 mm
Mass	Approx. 2.9 kg net per speaker

Front speaker SS-RG30T for MHC-RG30T

Speaker system	3-way, 3-unit, bass-reflex type
Speaker units	
Sub Woofer:	13 cm, cone type
Woofer:	13 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 215 × 325 × 254 mm
Mass	Approx. 4.0 kg net per speaker

Surround speaker SS-RS60 for MHC-RG4SR

Speaker system	Full range, bass-reflex type
Speaker units	
Full range:	8 cm, cone type
Nominal impedance	16 ohms
Dimensions (w/h/d)	Approx. 180 × 101 × 198 mm
Mass	Approx. 1.0 kg net per speaker

Other models:
Front speaker SS-DX10 for MHC-DX10

Speaker system	2-way, 2-unit, bass-reflex type
Speaker units	
Woofer:	13 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 200 × 325 × 223 mm
Mass	Approx. 2.9 kg net per speaker

General

Power requirements	
North American models:	120 V AC, 60 Hz
European models:	230 V AC, 50/60 Hz
Australian models:	230 – 240 V AC, 50/60 Hz
Mexican models:	120 V AC, 50/60 Hz
Other models:	120 V, 220 V or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	
USA models:	
MHC-RG4SR:	160 watts
MHC-RG30T:	115 watts
MHC-RG20:	95 watts
Canadian models:	
MHC-RG30T:	115 watts
MHC-RG20:	95 watts
European model:	
MHC-RG20/RG11:	85 watts 1.0 watts (at the Power Saving Mode)
Other model:	
MHC-DX10:	85 watts
Dimensions (w/h/d)	Approx. 280 × 325 × 421 mm
Mass	
North American models:	
HCD-RG4SR:	Approx. 8.7 kg
HCD-RG30T:	Approx. 8.2 kg
HCD-RG20:	Approx. 7.8 kg
European model:	
HCD-RG20/RG11:	Approx. 8.1 kg
Other model:	
HCD-DX10:	Approx. 8.2 kg
Supplied accessories:	AM loop antenna (1) Remote Commander (1) Batteries (2) FM lead antenna (1) Front speaker pads (8)

Design and specifications are subject to change without notice.

Sony Corporation Printed in China http://www.sony.net/